

H1574
0056942

Client: TNU-HANFORD B99-093
LVL #: 0110L236
SDG/SAF #: H1574/B99-093

W.O. #: 11343-606-001-9999-00
Date Received: 10-31-2001

GC/MS VOLATILE

RECEIVED
APR 19 2002


Six (6) soil samples were collected on 10-29-2001.

EDMC

The samples and their associated QC samples were analyzed according to criteria set forth in Lionville Laboratory OPs based on SW 846 Method 8260B for client specified Volatile target compound Carbon Tetrachloride on 11-09,12-2001.

The following is a summary of the QC results accompanying these sample results and a description of any problems encountered during their analyses:

1. The cooler temperature upon receipt has been recorded on the chain-of-custody.
2. Samples were analyzed within required holding time.
3. Non-target compounds were not reported.
4. All samples required a medium level analysis due to high levels of the target compound.
5. One (1) of thirty-three (33) surrogate recoveries was outside EPA QC limits. The analysis of associated matrix spike samples fulfills the reanalysis requirement.
6. All matrix spike recoveries were within EPA QC limits.
7. The blank spike recovery was within EPA QC limits.
8. "I certify that this sample data package is in compliance with SOW requirements, both technically and for completeness, other than the conditions detailed above. Release of the data contained in this hard-copy data package has been authorized by the Laboratory Manager or a designee, as verified by the following signature."


J. Michael Taylor
President
Lionville Laboratory Incorporated

12-4-01
Date

som\group\data\voa\tnu-hanford\0111-236.doc

The results presented in this report relate only to the analytical testing and conditions of the samples at receipt and during storage. All pages of this report are integral parts of the analytical data. Therefore, this report should only be reproduced in its entirety of 9 pages.

02

GLOSSARY OF VOA DATA

ABBREVIATIONS

BS	=	Indicates blank spike in which reagent grade water is spiked with the CLP matrix spike solutions and carried through all the steps in the method. Spike recoveries are reported.
BSD	=	Indicates blank spike duplicate.
MS	=	Indicates matrix spike.
MSD	=	Indicates matrix spike duplicate.
DL	=	Suffix added to sample number to indicate that results are from a diluted analysis.
NA	=	Not Applicable.
DF	=	Dilution Factor.
NR	=	Not Required.
SP, Z	=	Indicates Spiked Compound.

GLOSSARY OF VOA DATA

DATA QUALIFIERS

- U** = Compound was analyzed for but not detected. The associated numerical value is the estimated sample quantitation limit which is included and corrected for dilution and percent moisture.
- J** = Indicates an estimated value. This flag is used under the following circumstances: 1) when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed; or 2) when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. For example, if the limit of detection is 10 ug/L and a concentration of 3 ug/L is calculated, it is reported as 3J.
- B** = This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination. This flag is also used for a TIC as well as for a positively identified TCL compound.
- E** = Indicates that the compound was detected beyond the calibration range and was subsequently analyzed at a dilution.
- D** = Identifies all compounds identified in an analysis at a secondary dilution factor.
- I** = Interference.
- NQ** = Result qualitatively confirmed but not able to quantify.
- N** = Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.
- X** = This flag is used for a TIC compound which is quantified relative to a response factor generated from a daily calibration standard (rather than quantified relative to the closest internal standard).
- Y** = Additional qualifiers used as required are explained in the case narrative.

TECHNICAL FLAGS FOR MANUAL INTEGRATION

Manual quan modifications or integrations are performed routinely to improve the data quality for a variety of technical reasons. Documentation of these modifications should be clear and concise. The following "flags" are used to indicate the technical reasons for quan modifications:

- MP** - Missed Peak: manually added peak not found by automatic quan program.
- PA** - Peak Assignment: quan report was changed to reflect correct peak assignment.
- RI** - Routine Integration: routine integrations are performed for some analytes that are consistently integrated improperly by the automatic integration programs. Examples are the dichlorobenzene isomers on the VOA packed column and benzo(b)fluoranthene/benzo(k)fluoranthene which are poorly resolved on the BNA column.
- SP** - Split Peak: the automatic integration improperly split the peak; a manual integration was performed to get the correct area.
- CB** - Coelution/Background: peak was manually integrated to eliminate contribution from coeluting compounds, background signal, or other interference.
- PI** - Proper Integration: a peak with poor or inconsistent integration (e.g., excessive tail) was properly integrated manually.

Lionville Laboratory, Inc.

Volatiles By GC/MS, Special List

Report Date: 11/29/01 07:40

RFW Batch Number: 0110L236

Client: TNUHANFORD B99-093 H1574 Work Order: 11343606001 Page: 1a

	Cust ID:	B13CB8	B13CB8	B13CB8	B13CB9	B13CC0	B13CC1
Sample	RFW#:	001	001 MS	001 MSD	002	003	004
Information	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	D.F.:	1.95	1.95	1.95	200	195	97.6
	Units:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
	Level:	MED	MED	MED	MED	MED	MED
	1,2-Dichloroethane-d4	99 %	99 %	97 %	97 %	101 %	100 %
Surrogate	Toluene-d8	116 %	104 %	102 %	99 %	100 %	100 %
Recovery	Bromofluorobenzene	50 * %	86 %	88 %	93 %	93 %	88 %
=====fl=====fl=====fl=====fl=====fl=====fl=====fl=====							
Carbon Tetrachloride		5600	102 %	106 %	2300000	1800000	640000

	Cust ID:	B13CC2	B13CC3	VBLKAB	VBLKAB BS	VBLKAH
Sample	RFW#:	005	006	01LVG048-MB1	01LVG048-MB1	01LVG949-MB1
Information	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL
	D.F.:	19.5	200	2.00	2.00	2.00
	Units:	UG/KG	UG/KG	UG/KG	UG/KG	UG/KG
	Level:	MED	MED	MED	MED	MED
	1,2-Dichloroethane-d4	99 %	98 %	97 %	100 %	99 %
Surrogate	Toluene-d8	94 %	100 %	100 %	100 %	97 %
Recovery	Bromofluorobenzene	90 %	93 %	91 %	90 %	93 %
=====fl=====fl=====fl=====fl=====fl=====fl=====fl=====						
Carbon Tetrachloride		140000	1900000	620 U	115 %	620 U

*= Outside of EPA CLP QC limits.



FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

Client <u>TNU-HANCO SAF 1399-093</u>				Refrigerator # <u>1</u>																											
Est. Final Proj. Sampling Date				#/Type Container				Liquid <u>1/2</u>																							
Project # <u>11343-606-001-9999-00</u>				Volume				Liquid <u>250</u>																							
Project Contact/Phone #				Preservatives				Solid <u>1</u>																							
Lionville Laboratory Project Manager <u>05</u>				ANALYSES REQUESTED				ORGANIC																							
OC <u>SPEC</u> Del <u>STD</u> TAT <u>30 day</u>								INORG																							
Date Rec'd <u>10-31-01</u> Date Due <u>11-30-01</u>								Metal <u>1</u> CN <u>1</u>																							
MATRIX CODES:				Lab ID				Client ID/Description				Matrix QC Chosen (✓)				Matrix				Date Collected				Time Collected				Lionville Laboratory Use Only			
S - Soil				MS				MSD																							
SE - Sediment																															
SO - Solid																															
SL - Sludge																															
W - Water																															
O - Oil																															
A - Air																															
DS - Drum																															
Solids																															
DL - Drum																															
Liquids																															
L - EP/CLP																															
Leachate																															
WI - Wipe																															
X - Other																															
F - Fish																															

Special Instructions:

SAF B99-093
Run Matrix QC

DATE/REVISIONS:

- _____
- _____
- _____
- _____
- _____
- _____

Lionville Laboratory Use Only

- Samples were:
- 1) Shipped ✓ or Hand Delivered _____
 - 2) Ambient or Chilled
 - 3) Received in Good Condition ✓ or N
 - 4) Samples Properly Preserved ✓ or N
 - 5) Received Within Holding Times ✓ or N

- Tamper Resistant Seal was:
- 1) Present on Outer Package ✓ or N
 - 2) Unbroken on Outer Package ✓ or N
 - 3) Present on Sample ✓ or N
 - 4) Unbroken on Sample ✓ or N
 - 5) COC Record Present Upon Sample Rec't ✓ or N
 - 6) Cooler Temp. 1.3 °C

Relinquished by

Received by

Date

Time

Relinquished by

Received by

Date

Time

COMPOSITE
WASTEORIGINAL
REWRITTEN

Discrepancies Between
Samples Labels and
COC Record? Y or N ✓

NOTES:

01106236

Bechtel Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				B99-093-35		Page 1 of 1	
Collector R Fahiberg		Company Contact Virginia Rohay		Telephone No. 372-9100		Project Coordinator TRENT, SJ		Price Code 9N Data Turnaround 45 Days	
Project Designation 200-ZP-2 Passive Soil Vapor Extraction - Other Solid		Sampling Location 200 West		SAF No. B99-093		Air Quality <input type="checkbox"/>			
Ice Chest No. ERC-96-018		Field Logbook No. EL 1517-2		COA R20ZP2DP60		Method of Shipment Federal Express			
Shipped To TM/RECRA		Offsite Property No. A0200019		Bill of Lading/Air Bill No. 42357954-8409					
POSSIBLE SAMPLE HAZARDS/REMARKS				Preservation		Cool 4C			
Special Handling and/or Storage				Type of Container		aG			
				No. of Container(s)		1			
				Volume		250mL			
SAMPLE ANALYSIS				VOA - 8260A (TCL) (Carbon tetrachloride); Moisture Content - D2216					
								Samples stored in Ref. #2A at the 3728 Shipping Facility on 10/29/01. Collector not available to relinquish samples on 10/30/01 for shipment. RT 10:30:01	
Sample No.	Matrix *	Sample Date	Sample Time						
B13CB8	OTHER SOLID	10-29-01	1055	X					
B13CB9	OTHER SOLID	10-29-01	1108	X					
B13CC0	OTHER SOLID	10-29-01	1117	X					
B13CC1	OTHER SOLID	10-29-01	1131	X					
CHAIN OF POSSESSION				Sign/Print Names		SPECIAL INSTRUCTIONS			
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time		<p>** Laboratory may use medium level preparation for VOA. They are to report any other halogenated compounds found.</p> <p>** Laboratory must include the % Moisture data as part of all hard copy reports.</p> <p>Samples did not originate in radiological controlled area. No total activity associated with sample/samples. RT 10:30:01</p>	
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time			
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time			
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time			
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time			
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time		Matrix *	
LABORATORY SECTION		Received By		Title		Date/Time		S-Soil SS-Sediment SO-Solid S-Sludge W-Water O-Oil D-Dry DL-Dry Liquid T-Tissue W-Wipe L-Liquid V-Vegetation X-Other	
FINAL SAMPLE DISPOSITION		Disposal Method		Disposed By		Date/Time			



FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS

Client TNU-HANCO SAF B99-093

Est. Final Proj. Sampling Date _____

Project # 11343-606-001-9999-00

Project Contact/Phone # _____

Lionville Laboratory Project Manager 05QC SPEC Del STD TAT 30 daysDate Rec'd 10-31-01Date Due 11-30-01

MATRIX CODES:

S - Soil
SE - Sediment
SO - Solid
SL - Sludge
W - Water
O - Oil
A - Air
DS - Drum Solids
DL - Drum Liquids
L - EP/TCLP Leachate
WI - Wipe
X - Other
F - Fish

Lab ID

Client ID/Description

Matrix QC Chosen (✓)

MS

MSD

Matrix

Date Collected

Time Collected

0624X

Lionville Laboratory Use Only

ANALYSES REQUESTED

ORGANIC

VOA

BNA

Pest/PCB

Herb

INORG

Metal

N

Special Instructions:

SAF B99-093
Run Matrix QC

DATE/REVISIONS:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Lionville Laboratory Use Only

Samples were:
1) Shipped ☒ or Hand Delivered _____
Airbill # 5116121
2) Ambient or Cooled ☒
3) Received in Good Condition ☒ or N
4) Samples Properly Preserved ☒ or N
5) Received Within Holding Times ☒ or N

Tamper Resistant Seal was:
1) Present on Outer Package ☒ or N
2) Unbroken on Outer Package ☒ or N
3) Present on Sample ☒ or N
4) Unbroken on Sample ☒ or N
COC Record Present Upon Sample Rec't ☒ or N
Cooler Temp. 1.3 °C

Relinquished by

Received by

Date

Time

FeD Ex V. Fleming 10-31-01 0925

Relinquished

COMPOSITE WASTE

Received by

Date

Time

ORIGINAL REWRITTEN

Discrepancies Between Samples Labels and COC Record? Y or ☒ N
NOTES:

Lionville Laboratory Incorporated

WET CHEMISTRY

METHODS GLOSSARY FOR SOIL/SOLIDS SAMPLE ANALYSIS

	<u>ASTM</u>	<u>SW846</u>	<u>OTHER</u>
% Ash	— D2216-80		
% Moisture	— ✓ D2216-80		— ILMO4.0 (e)
% Solids	— ✓ D2216-80		— ILMO4.0 (e)
% Volatile Solids	— D2216-80		
ASTM Extraction in Water	— D3987-81/85		
BTU	— D240-87		
CEC		— 9081	— c
Chromium VI		— 3060A/7196A	
Corrosivity ___ by coupon ___ by pH		— 1110(mod) — 9045C	
Cyanide, Total		— 9010B	— ILMO4.0 (e)
Cyanide, Reactive		— Section 7.3/9014	
Halides, Extractable Organic		— 9020B	— EPA 600/4/84-008
Halides, Total		— 9020B	— EPA 600/4/84-008
EP Toxicity		— 1310A	
Flash Point		— 1010	
Ignitability		— 1010	
Oil & Grease		— 9071A	
Carbon, Total Organic		— 9060	— Lloyd Kahn (mod)
Oxygen Bomb Prep for Anions	— D240-87(mod)	— 5050	
Petroleum Hydrocarbons, Total Recoverable		— 9071	— EPA 418.1
pH, Soil		— 9045C	
Sulfide, Reactive		— Section 7.3/9030B	
Sulfide		— 9030B(mod)	
Specific Gravity	— D1429-76C/	— D5057-90	
Sulfur, Total		— 9056	
Synthetic Preparation Leach		— 1312	
Paint Filter		— 9095A	
Other:	Method:		
Other:	Method		

Lionville Laboratory Incorporated

METHOD REFERENCES AND DATA QUALIFIERS

DATA QUALIFIERS

U = Indicates that the parameter was not detected at or above the reported limit. The associated numerical value is the sample detection limit.

* = Indicates that the original sample result is greater than 4x the spike amount added.

ABBREVIATIONS

MB = Method or Preparation Blank.

MS = Matrix Spike.

MSD = Matrix Spike Duplicate.

REP = Sample Replicate

LC = Laboratory Control Sample.

NC = Not calculated.

A suffix of -R, -S, or -T following these codes indicate a replicate, spike or sample duplicate analysis respectively.

ANALYTICAL WET CHEMISTRY METHODS

1. ASTM Standard Methods.
2. USEPA Methods for Chemical Analysis of Water and Wastes (USEPA 600/4-79-020).
3. Test Methods for Evaluating Solid Waste (USEPA SW-846).
 - a. Standard Methods for the Examination of Water and Waste, 16 ed, (1983).
 - b. Standard Methods for the Examination of Water and Waste, 17 ed, (1989)/18ed (1992).
 - c. Method of Soil Analysis, Part 1, Physical and Mineralogical Methods, 2nd ed, (1986).
 - d. Method of Soil Analysis, Part 2, Chemical and Microbiological Properties, Am. Soc. Agron., Madison, WI (1965).
 - e. USEPA Contract Laboratory Program, Statement of Work for Inorganic Analysis.
 - f. Code of Federal Regulations.

Lionville Laboratory, Inc.

INORGANICS DATA SUMMARY REPORT 11/12/01

CLIENT: TNUHANFORD B99-093 H1574
WORK ORDER: 11343-606-001-9999-00

LVL LOT #: 0110L236

SAMPLE	SITE ID	ANALYTE	RESULT	UNITS	REPORTING LIMIT	DILUTION FACTOR
-----	-----	-----	-----	-----	-----	-----
-001	B13CB8	% Moisture	8.9	%	0.01	1.0
		% Solids	91.1	%	0.01	1.0
-002	B13CB9	% Moisture	24.6	%	0.01	1.0
		% Solids	75.4	%	0.01	1.0
-003	B13CC0	% Moisture	28.2	%	0.01	1.0
		% Solids	71.8	%	0.01	1.0
-004	B13CC1	% Moisture	14.4	%	0.01	1.0
		% Solids	85.6	%	0.01	1.0
-005	B13CC2	% Moisture	20.4	%	0.01	1.0
		% Solids	79.6	%	0.01	1.0
-006	B13CC3	% Moisture	26.8	%	0.01	1.0
		% Solids	73.2	%	0.01	1.0

Lionville Laboratory, Inc.

INORGANICS PRECISION REPORT 11/12/01

CLIENT: TNUHANFORD B99-093 H1574
 WORK ORDER: 11343-606-001-9999-00

LVL LOT #: 0110L236

SAMPLE	SITE ID	ANALYTE	INITIAL RESULT	REPLICATE	RPD	DILUTION FACTOR (REP)
-----	-----	-----	-----	-----	-----	-----
-001REP	B13CB8	% Solids	91.1	90.8	0.41	1.0

01106236

Custody Transfer Record/Lab Work Request

FIELD PERSONNEL: COMPLETE ONLY SHADED AREAS



Client 7NKK-HANFORD SAF B399-093

Est. Final Proj. Sampling Date 11343-606-001-9999-00

Project # 11343-606-001-9999-00

Project Contact/Phone # 0 J

Lionville Laboratory Project Manager 0 J

QC SPCC Del STD TAT 30 day

Date Rec'd 10-31-01 Date Due 11-30-01

MATRIX CODES:	Lab ID	Client ID/Description	Matrix QC Chosen (✓)		Matrix	Date Collected	Time Collected	Lionville Laboratory Use Only					
			MS	MSD				VOA	BNA	PCB	Herb	INORG	Metal
S - Soil	001	B13C B8			S	1059-01	1055						
SE - Sediment	002	B9					1108						
SO - Solid	003	CO					1117						
SL - Sludge	004	CL					1121						
W - Water	005	CL					1140						
GO - Oil	006	CL					1154						
A - Air													
DS - Drum													
DL - Drum													
L - Liquids													
EP/IT/OLP													
Wt - Wipe													
X - Other													
F - Fish													

Special Instructions: SAF B99-093
Run Matrix QC

DATE/REVISIONS:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Relinquished by ESD Ex Received by 1/9/02 Date 10-31-01 Time 0825

Relinquished COMPOSITE WASTE Received by _____ Date _____ Time _____

Discrepancies Between Samples Labels and COC Record? Y or N Y

NOTES: _____

4235 7954 RADA

Lionville Laboratory Use Only

Samples were: 1) Shipped ✓ or Hand Delivered ✓

Airball # 51121

2) Ambient or Collected ✓

3) Received in Good Condition ✓ or N

4) Samples Properly Preserved ✓ or N

5) Received Within Holding Times ✓ or N

6) Unbroken on Sample ✓ or N

7) Unbroken on Sample ✓ or N

8) Unbroken on Sample ✓ or N

9) Unbroken on Sample ✓ or N

10) Unbroken on Sample ✓ or N

11) Unbroken on Sample ✓ or N

12) Unbroken on Sample ✓ or N

13) Unbroken on Sample ✓ or N

14) Unbroken on Sample ✓ or N

15) Unbroken on Sample ✓ or N

16) Unbroken on Sample ✓ or N

17) Unbroken on Sample ✓ or N

18) Unbroken on Sample ✓ or N

19) Unbroken on Sample ✓ or N

20) Unbroken on Sample ✓ or N

21) Unbroken on Sample ✓ or N

22) Unbroken on Sample ✓ or N

23) Unbroken on Sample ✓ or N

24) Unbroken on Sample ✓ or N

25) Unbroken on Sample ✓ or N

26) Unbroken on Sample ✓ or N

27) Unbroken on Sample ✓ or N

28) Unbroken on Sample ✓ or N

29) Unbroken on Sample ✓ or N

30) Unbroken on Sample ✓ or N

31) Unbroken on Sample ✓ or N

32) Unbroken on Sample ✓ or N

33) Unbroken on Sample ✓ or N

34) Unbroken on Sample ✓ or N

35) Unbroken on Sample ✓ or N

36) Unbroken on Sample ✓ or N

37) Unbroken on Sample ✓ or N

38) Unbroken on Sample ✓ or N

39) Unbroken on Sample ✓ or N

40) Unbroken on Sample ✓ or N

41) Unbroken on Sample ✓ or N

42) Unbroken on Sample ✓ or N

43) Unbroken on Sample ✓ or N

44) Unbroken on Sample ✓ or N

45) Unbroken on Sample ✓ or N

46) Unbroken on Sample ✓ or N

47) Unbroken on Sample ✓ or N

48) Unbroken on Sample ✓ or N

49) Unbroken on Sample ✓ or N

50) Unbroken on Sample ✓ or N

51) Unbroken on Sample ✓ or N

52) Unbroken on Sample ✓ or N

53) Unbroken on Sample ✓ or N

54) Unbroken on Sample ✓ or N

55) Unbroken on Sample ✓ or N

56) Unbroken on Sample ✓ or N

57) Unbroken on Sample ✓ or N

58) Unbroken on Sample ✓ or N

59) Unbroken on Sample ✓ or N

60) Unbroken on Sample ✓ or N

61) Unbroken on Sample ✓ or N

62) Unbroken on Sample ✓ or N

63) Unbroken on Sample ✓ or N

64) Unbroken on Sample ✓ or N

65) Unbroken on Sample ✓ or N

66) Unbroken on Sample ✓ or N

67) Unbroken on Sample ✓ or N

68) Unbroken on Sample ✓ or N

69) Unbroken on Sample ✓ or N

70) Unbroken on Sample ✓ or N

71) Unbroken on Sample ✓ or N

72) Unbroken on Sample ✓ or N

73) Unbroken on Sample ✓ or N

74) Unbroken on Sample ✓ or N

75) Unbroken on Sample ✓ or N

76) Unbroken on Sample ✓ or N

77) Unbroken on Sample ✓ or N

78) Unbroken on Sample ✓ or N

79) Unbroken on Sample ✓ or N

80) Unbroken on Sample ✓ or N

81) Unbroken on Sample ✓ or N

82) Unbroken on Sample ✓ or N

83) Unbroken on Sample ✓ or N

84) Unbroken on Sample ✓ or N

85) Unbroken on Sample ✓ or N

86) Unbroken on Sample ✓ or N

87) Unbroken on Sample ✓ or N

88) Unbroken on Sample ✓ or N

89) Unbroken on Sample ✓ or N

90) Unbroken on Sample ✓ or N

91) Unbroken on Sample ✓ or N

92) Unbroken on Sample ✓ or N

93) Unbroken on Sample ✓ or N

94) Unbroken on Sample ✓ or N

95) Unbroken on Sample ✓ or N

96) Unbroken on Sample ✓ or N

97) Unbroken on Sample ✓ or N

98) Unbroken on Sample ✓ or N

99) Unbroken on Sample ✓ or N

100) Unbroken on Sample ✓ or N

Bechtel Hanford Inc.						CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST								B99-093-35	Page 1 of 1						
Collector R Fahlberg						Company Contact Virginia Rohay				Telephone No. 372-9100				Project Coordinator TRENT, SJ		Price Code 9N	Data Turnaround 				
Project Designation 200-ZP-2 Passive Soil Vapor Extraction - Other Solid						Sampling Location 200 West				SAF No. B99-093				Air Quality <input type="checkbox"/>		45 Days					
Ice Chest No. ERC-96-08						Field Logbook No. EL 1517-2				COA R20ZP2DP60				Method of Shipment Federal Express							
Shipped To TM/RECRA						Offsite Property No. A020019				Bill of Lading/Air Bill No. 42357454-8409											
POSSIBLE SAMPLE HAZARDS/REMARKS										Preservation		Cool AC									
Special Handling and/or Storage										Type of Container		aG									
										No. of Container(s)		1									
										Volume		250mL									
SAMPLE ANALYSIS										VOA - 8260A (TCL) (Carbon tetrachloride); Moisture Content - D2216											
Sample No.		Matrix *	Sample Date	Sample Time																	
B13CB8		OTHER SOLID	10-29-01	1055	X																
B13CB9		OTHER SOLID	10-29-01	1108	X																
B13CC0		OTHER SOLID	10-29-01	1112	X																
B13CC1		OTHER SOLID	10-29-01	1131	X																
CHAIN OF POSSESSION										SPECIAL INSTRUCTIONS										Matrix *	
Relinquished By/Removed From					Date/Time	Received By/Stored In					Date/Time	** Laboratory may use medium level preparation for VOA. They are to report any other halogenated compounds found. ** Laboratory must include the % Moisture data as part of all hard copy reports. Samples did not originate in radiological controlled area. No total activity associated with sample/samples. RT 10-30-01					g=Soil SB=Sediment BO=Bolt W=Water O=Oil AmAir DB=Dross Solids EX=Dross Liquids To=Tissue WP=Wipe LI=Liquid V=Vegetation X=Other				
RFAL R.Fahlgang					10-29-01 1400	Reif z.g					10-29-01 1400										
Ref 2A 3128					10-30-01 0900	RT Thorey					10-30-01 0900										
KTC RC					10-30-01 0900	JEDC															
Ted EP					10-31-01 0925	H-Fleerowig					10-31-01 0925										
Relinquished By/Removed From					Date/Time	Received By/Stored In					Date/Time										
Relinquished By/Removed From					Date/Time	Received By/Stored In					Date/Time										
Relinquished By/Removed From					Date/Time	Received By/Stored In					Date/Time										
LABORATORY SECTION		Received By		Title		Date/Time															
FINAL SAMPLE DISPOSITION		Disposal Method		Disposed By		Date/Time															

01106236

Bechtel Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				B99-093-36		Page 1 of 1	
Collector R Fahlberg		Company Contact Virginia Rohay		Telephone No. 372-9100		Project Coordinator TRENT, SJ		Price Code 9N Data Turnaround 45 Days	
Project Designation 200-ZP-2 Passive Soil Vapor Extraction - Other Solid		Sampling Location 200 West		SAF No. B99-093		Air Quality <input type="checkbox"/>			
Ice Chest No. ERC 96.018		Field Logbook No. EL 1517-2		COA R20ZP2DP60		Method of Shipment Federal Express			
Shipped To TMA(RECRA)		Offsite Property No. A020019		Bill of Lading/Air Bill No. 42367954-8409					
POSSIBLE SAMPLE HAZARDS/REMARKS				Preservation Cool 4C					
Special Handling and/or Storage				Type of Container aG					
				No. of Container(s) 1					
				Volume 250mL					
SAMPLE ANALYSIS				VOA - 8260A (TCL) (Carbon tetrachloride); Moisture Content - D2216					
Sample No.		Matrix *		Sample Date		Sample Time			
B13CC2		OTHER SOLID		10-29-01		1140		X	
B13CC3		OTHER SOLID		10-29-01		1154		X	
B13004		OTHER SOLID							
B13005		OTHER SOLID							
CHAIN OF POSSESSION				Sign/Print Names		SPECIAL INSTRUCTIONS			
Relinquished By/Removed From R. Fahlberg		Date/Time 10-29-01 1400		Received By/Stored In Ref. 2-A		Date/Time 10-29-01 1400		<p>** Laboratory may use medium level preparation for VOA. They are to report any other halogenated compounds found.</p> <p>** Laboratory must include the % Moisture data as part of all hard copy reports.</p> <p>Samples did not originate in radiological controlled area. No total activity associated with sample/samples.</p> <p>RT 10.30.01</p>	
Relinquished By/Removed From R. Fahlberg		Date/Time 10-30-01 0900		Received By/Stored In R. Fahlberg		Date/Time 10-30-01 0900			
Relinquished By/Removed From R. Fahlberg		Date/Time 10-30-01 1030		Received By/Stored In F. D. C.		Date/Time 10-30-01 1030			
Relinquished By/Removed From F. D. C.		Date/Time 10-31-01 0925		Received By/Stored In V. Hernandez		Date/Time 10-31-01 0925			
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time			
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time			
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time			
LABORATORY SECTION		Received By		Title		Date/Time			
FINAL SAMPLE DISPOSITION		Disposal Method		Disposed By		Date/Time			

Samples stored in Ref. # 2A at the
3728 Shipping Facility on 10/29/01.
Collector not available to relinquish
samples on 10/30/01 for shipment.

RT 10.30.01

Matrix *

S=Soil
SB=Soil
SO=Solid
SL=Sludge
W=Water
O=Oil
A=Air
DB=Dry Solids
DL=Dry Liquids
T=Time
W=Wipe
L=Liquid
V=Vegetation
X=Other

February 12, 1999

Figure 1. Sample Check-in List

Date/Time Received: 10-31-01 0925SDG#: 01106236

Work Order Number: _____

SAF# B99-093Shipping Container ID: ERC-96-018Chain of Custody # B99-093-35

1. Custody Seals on shipping container intact? Yes ☒ No ☐
2. Custody Seals dated and signed? Yes ☒ No ☐
3. Chain-of-Custody record present? Yes ☒ No ☐
4. Cooler temperature 1.3
5. Vermiculite/packing materials is Wet ☒ Dry ☐
6. Number of samples in shipping container: 6
7. Sample holding times exceeded? Yes ☐ No ☒

8. Samples have:
- | | |
|----------------------------|---|
| <u> </u> tape | <u> </u> hazard labels |
| <u> ✓ </u> custody seals | <u> </u> appropriate sample labels |

9. Samples are:
- | | |
|--------------------------------|--------------------------------|
| <u> ✓ </u> in good condition | <u> </u> leaking |
| <u> </u> broken | <u> </u> have air bubbles |

10. Were any anomalies identified in sample receipt? Yes ☐ No ☒

11. Description of anomalies (include sample numbers): _____

Sample Custodian/Laboratory: *Peter Heavens* Date: 10-31-01

Telephoned to: _____ On _____ By _____